

ABSTRACT OF THE DISCLOSURE

An X-ray-tomographic imaging apparatus for obtaining image data on a predetermined tomographic section of a subject with efficiency and effectiveness by using a plurality of X-ray projection images achieved by a plurality of X-rays that is made incident on the tomographic section from different directions is provided. The X-ray-tomographic imaging apparatus comprises a solid-image pickup unit that can convert each of the X-ray projection images to a signal and read the signal by a non-destructive reading method and a control unit making the solid-image pickup unit accumulate the signals of the X-ray projection images and read the signals by the non-destructive reading method during the signal accumulation.